

Relaxation Polarization of the System $\text{SrTiO}_3 \cdot x\text{MnO}$

S/048/60/024/02/03/009
B006/B014

the simultaneous presence of bivalent and trivalent manganese, i.e., Mn^{2+} and Mn^{3+} transitions are possible; (3) simultaneous presence of weakly bound ions and electrons is possible in the system $\text{SrTiO}_3 \cdot n(\text{Bi}_2\text{O}_3 \cdot \text{MnO})$. There are 2 figures, 3 tables, and 4 Soviet references. ✓

Card 3/3

LIPKIN, Yur Matanovich; SOLOK, Alla Mikhaylovna; SHKOLA, Oleg
Ivanovich; KELLER, O.K., red.

[Ultrasonic cleaning of pipes] Ul'trazvukovaya ochistka trub.
Leningrad, 1965. 22 p. (MIRA 18:5)

AUTHOR: Solokh, M. A., Engineer SOV/100-59-3-3/13

TITLE: Specialisation in Stroy mekhanizatsiya Trust of Glavkiyevstroy. (Opyt spetsializatsii rabot v treste Stroy mekhanizatsiya Glavkiyevstroya).

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1958, Nr.3. pp. 6 - 8. (USSR).

ABSTRACT: The Glavkiyevstroy formed in 1955 - 56 special Trusts with the aim to concentrate in them building machinery and to reorganise their maintenance. In 1957 the number of building machines concentrated in Glavkiyevstroy totalled: 70 excavators, 75 bulldozers, 160 tower cranes, 84 lorry-mounted cranes, 40 rollers and 10 lorry-mounted graders. The mechanisation carried out by Glavkiyevstroy during 1957 amounted to 8.3% and power resources amounted to 3 h.p. per man. From the total output of excavation work Stroy mekhanizatsiya carried out 76.4%. Output of excavators with 0.5 m³ capacity, in conjunction with bulldozers and mechanical shovels, reached 450 - 500 m³ of excavating material per shift. For the shifting of frozen ground air heaters designed by Eng. M. G. Zaykovatyy are used. Excavator ETN-122, manufactured by Kiyev factory "Krasnyy Ekskavator", is a new machine for excavating

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SOV/100-53-3-3/13

Specialisation in Stroyemkhanizatsiya Trust of Glavklyevstroya.

trenches for electrical and telephone cables. The output of tower cranes during 1957 increased by 18% in comparison with 1956. Enclosed table gives figures of the improved output of excavators. There is 1 illustration and 5 photographs of operatives.

1. Construction equipment--Performance

Card 2/2

KHROMITSKIY, P., inzh.; SOLOKHA, A., inzh.

For better organized maintenance and repair of agricultural
machinery. Tekh. v sel'khoz. 20 no.7:51-56 J1 '60.

(MIRA 13:9)

(Agricultural machinery--Maintenance and repair)

SOLOKHA, Andrey Antonovich; KHRUMETSKIY, Petr Alekseyevich; FILATOV,
Aleksandr Grigor'yevich; SHALYT, N.A., red.; KOZLOVSKAYA,
M.D., tekhn. red.

[Quality control in repairing tractors and agricultural machines
on collective farms] Kontrol' kachestva remonta traktorov i sel'-
khoziaistvennykh mashin v kolkhozakh. Moskva, Proftekhizdat,
1961. 166 p. (MIRA 16:2)

(Agricultural machinery—Maintenance and repair)

SOLOKHA, A.P., inzh.; CHASHCHINOV, A.V. inzh.; TARASEVICH, L.I., inzh.

Apparatus for automatically controlling pumps. Gor. zhur no.4:52-53 Ap '63
(MIRA 16:4)

(Mine pumps)

(Automatic control)

SOLOKHA, A.P.; NAZARENKO, V.A.

Automatic pumping plants in mining. Ugol' Ukr. Vol.3 no.5:22-23
My '59. (MIRA 12:9)

1. Konotopskiy zavod "Krasnyy metallist".
(Mine pumps)

SOLOKHA, A.P., inzh.; NESTERENKO, L.I., inzh.

Improving the starter systems for mine electrical drills. Ugol'
35 no. 4:15-17 Ap '60. (MIRA 14:4)

1. Zavod "Krasnyy metallist"
(Rock drills) (Remote control)

TARASEVICH, G.V., inzh.; TARASEVICH, L.I., inzh.; SOLOKHA, A.P.

Apparatus for protecting hoists. Gor. zhur. no.10:51-52
0 '63. (MIRA 16:11)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut,
g. Prokop'yevsk (for G. Tarasevich, L. Tarasevich).
2. Zavod "Krasnyy metallist", g. Konotop (for Solokha).

GAYEV, P.T., inzh.; ZELINSKIY, V.M., MIKHAYLYUK, M.T.; RUKMAN, V.I., SOLOKHA,
A.P.

Remote control of immersible pumps during mine drainage. Snakht.
stroit. 8 no.3 6-8 Mr '64. (MIRA 17:1)

1. Vsesoyuznyy trust po osushcheniya obvodnomnykh ugod'nykh mestozhdeniy Glavtsentroskhkhostroya Ministerstva stroitel'stva predpriyatiy ugod'noy promyshlennosti SSSR (for Gayev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Zelinskiy). 3. Institut Avtomatizatsii i mekhanizatsii elektromekhanicheskogo zavoda "Krasnyy metallist" (for Mikhaylyuk, Rukman, Solokha).

SOLOKHA, G. Geroy Sotsialisticheskogo Truda

Construction workers will keep their word. Sov.profsoliuzy 7
no.10:11-12 My '59. (MIRA 12:9)

1. Brigadir kamenshchikov Gremyachinskogo stroyupravleniya
trusta "Kizelshakhtostrov".
(Gremyachinsk--Construction industry--Labor productivity)

SOLCKHA, I.I.

Experience in the manufacture of warm women's boots. Kozh.-
obuv. prom. 7 no.5:34-35 My '65. (MIRA 18:8)

L 05245-67 EWT(1) GW

ACC NR: AT6013753

SOURCE CODE: UR/2667/65/000/033/0043/0056

AUTHOR: Anisimova, T. N. ; Solokha, T. F.

ORG: none ✕

15
B+1

TITLE: Method of obtaining characteristics for calculating wind velocity ✓

SOURCE: ✕ Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 33,
1965. Voprosy klimatologii (Problems in climatology), 43-56

TOPIC TAGS: wind velocity, wind direction, wind profile

ABSTRACT: The problems of determining the frequency of wind velocity by directions with and without consideration of calms is analyzed on the basis of data obtained in Western Siberia. A method of constructing the distribution curves of wind velocities under lowland conditions is described and their analysis is given. A method is proposed for using the average wind velocity and modal value of wind velocity to determine the probability of wind velocity from generalized nomograms. A preliminary conclusion is that when calm days are taken into account when analyzing the frequency of wind by directions and average velocities there are no substantial changes in the characteristic of the wind mode. However,

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L 08063-67 EWT(1) GW

ACC NR: AT6034373

SOURCE CODE: UR/2667/66/000/037/0062/0082

AUTHOR: Solokha, T. F.

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B+/

ORG: Scientific Research Institute of Aeroclimatology (Nauchno-issledovatel'skiy institut aeroklimatologii)

TITLE: Experimental calculation of the recurrence of temperature and wind-velocity combinations in the lower 100-m layer of the atmosphere

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 37, 1966. Voprosy klimatologii (Problems in climatology), 62-82

TOPIC TAGS: micrometeorology, atmospheric turbulence, ~~atmospheric boundary layer~~, ~~atmospheric~~ surface boundary layer, wind velocity, temperature inversion, meteorological tower, meteorologic test area, meteorologic polygon, lapse rate

ABSTRACT: The purpose of this work was to develop a method for approximate calculation of the frequency of temperature and wind-velocity combination at heights of 50 and 100 m on the basis of ground-level data. Most data used were from observations made on the 300-m meteorological tower at Obninsk, made available by the Institute of Applied Geophysics. These data made it possible to check the basic formulas and to make a direct check of the calculated frequency of temperature and wind-velocity combinations at a height of 100 m against factual data. Temperatures and wind

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ACC NR:

AT6034373

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velocities were observed at heights of 8, 48.6, and 96.8 m every three hr (0100, 0400, 0700, 1000, 1300, 1600, 1900, and 2200 hr) separately for the winter (December to February 1962 and 1963) and summer (June—August 1962—1964) seasons. The observations were irregular, totaling 148 in the winter and 242 in the summer. Wind and temperature profiles in the atmospheric surface boundary layer were analyzed by means of the Obukhov-Monin scheme; a simplified form of the Monin-Kazanskiy scheme was used for the lower 100-m layer. Lapse rates were calculated from temperature readings at the 8—48.6, and 8—96.8-m levels. All data were considered in relation to low cloud covers (0—7 and 8—10). Atmospheric stratification was determined by the following parameters: the lapse rate, the wind speed at the surface ($H = 8$ m), and low cloud cover (with time of day taken into account). Four groups of conditions were identified with different combinations of wind speeds at the ground level (≤ 3 m/sec and > 3 m/sec) and 0—7 and 8—10 cloud covers. It was found that a simple power function of the form $v = v_1(z/z_1)^m$ can be used to calculate the wind-speed distribution in the lower 100-m layer for daytime and nighttime conditions in the winter and for daytime conditions in the summer. Since changes in the wind speed in the 100-m layer during deep inversions (at night in the summer) with wind speeds of 0—1 m/sec at the ground level were not taken into account in the power function, the mean wind speed had to be calculated by differences in wind speed to obtain sufficiently accurate results. It was found that to determine temperature changes and to calculate the m powers, it was sufficient to use the mean values of the lapse

Card 2/3

SOLOKHIN, Andrey Mikhaylovich; VALIBALOV, I., red.; GERASEVICH, Z.,
tekhn. red.

[Handbook for the cutter-loader operator] Spravochnik gor-
nogo kombainera. Kemerovo, Kemerovskoe knizhnoe izd-vo,
1962. 258 p. (MIRA 16:8)
(Mining machinery)

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S/262/62/000/006/004/021
I007/I207

8 7-00
42134
AUTHOR:

Solokhin, E.L. (*Cond Tech. Sec*)

TITLE:

Investigations on flame propagation and stabilization behind a trough-shaped flameholder

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovye ustanovki, no. 6, 1962, 29, abstract 426149. (V sb. "Stabilizatsiya plameni i razvitiye protsessa sgoraniya v turbulentn. potoke". M., Oborongiz, 1961, 48-74).

TEXT: Results are reported on investigations of the structure of the reverse-current zone, the exchange mechanism between the zone and the working stream, as well as of the influence of various parameters on the zone structure and the exchange mechanism. The initial action of the jet behind flameholders of different size was investigated at a fixed distance from the nozzle outlet, from which emerged an axisymmetric turbulent jet of homogeneous, lean gasoline-air mixture. During the experiments, jet turbulence was

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Investigations on flame propagation ... S/262/62/000/006/004/021
IO07/I207

generated by means of grids. The parameters with one and the same flow conditions were measured by various methods. The following data were obtained: changes in the quenching characteristics of a lean combustible mixture upon variation of approach velocity from 30 to 90 m/sec and of initial flow turbulence (up to 15%); variation in size of the reverse-current zone and the gas flow velocity within this zone with the approach flow velocity, in absence of combustion or in case of free-jet combustion under close-to-quenching conditions; variation of the initial turbulence and the excess-air coefficient for a constant flow velocity; distribution of fuel temperature and concentration, of the axial flow velocity, and of the ionization currents in the circulation zone, under close-to-quenching conditions; variation of the gas temperature and fuel concentration along the isolines of discharge or along the interface between the circulation zone and the working flow (stream); variation of turbulence intensity in a cold stream in the presence of screens or in a free jet; distribution of mean frequencies ω_m and of the values of the Euler turbulence scale,

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ACCESSION NR: AT4041480

S/2535/64/000/157/0017/0050

AUTHOR: Solokhin, E. L. (Candidate of technical sciences)

TITLE: The combustion mechanism in the zone of secondary air introduction and the effect of the jet penetration range on the characteristics of gas turbine combustion chambers

SOURCE: Moscow. Aviatsionnyy institut. Trudy*, no. 157, 1964. Issledovaniya rabochego protsessa v kamerakh sgoraniya gazoturbinnnykh dvigateley (Studying the working processes of gas turbine engine combustion chambers), 17-50

TOPIC TAGS: combustion chamber, aviation turbine, combustion, secondary air injection, gas turbine, jet aircraft

ABSTRACT: Experiments were conducted with four aviation turbine combustion chamber models having flame tubes 220 mm in diameter, vaned inserts 100 mm in diameter, and conical flame holders to determine the effect of the secondary air jet penetration range on the heat release, the combustion efficiency, and the blow-off characteristics. Ionization current, temperature, fuel concentration,

ACCESSION NR: AT4041480

and velocity profiles were measured in different sections of the chamber with varying parameters of the main and secondary air flow. The results showed that when secondary air is introduced, the entire flame surface changes and combustion is intensified in the zone of the chamber axis. Due to these factors, the heat release from rich mixtures increases. Maximum heat release can be obtained either by increasing the pressure drop across the secondary air inlet orifices with unchanged operating parameters or by changing the operating parameters with unchanged pressure drop. Heat release maxima were experimentally obtained by both measures. The secondary air jet should penetrate to a large distance to ensure combustion around the jet and to intensify combustion in the vicinity of the chamber axis. The jet penetration range should be increased by enlarging the inlet orifices rather than by raising the pressure drop. Jets from small orifices are effective only for cooling the flame tube wall and are not effective for improving the combustion characteristics. The flow recirculation zone should be separated from the secondary air jet, for when the latter penetrates into the recirculation zone, the blow-off characteristics deteriorate.

Card 2/3

GIL'BERG, I.M., inst.; GIL'BERG, I.M., inst.; LITVINOV, K.I., technolog

Electric slag welding with a lamellar electrode of force hammer
heads. Svar. prov. no. 2:20-30 P 15.

(RUS 18:3)

1. Chelyabinskii metallurgicheskii zavod.

SOLOKHIN, I.

Chemical cleaning and dyeing of clothes. Prom.koop. no.1:28-29
Ja '57. (MLRA 10:4)
(Cleaning and dyeing industry)

SOLOKHIN, L., inzh.

Improve the technique of spot removing. Prom. koop. no. 5:14 My '58.
(Spotting (Cleaning)) (MIRA 11:4)

SOLOKHIN, L., inzh.

Let us have a look at tomorrow; unsolved problems of dry cleaning.
Mest. prom. i khud. promys. no.5:6 My '63. (MIRA 16:7)

(Cleaning and dyeing industry)

50005444, 1-11

00009

Thermochemistry of complex compounds. III. Method of determination of intramolecular combustion of inorganic salts in a calorimetric bomb. The heat of formation of ammonium bichromate and trichromate. A. F. Kapustinskii and A. A. Shilovskii (D. I. Mendeleev Chem. Technol. Inst., Moscow). *Izvest. Sektora Plutiny i Drug. Blagorod. Metal., Inst. Obshchei i Neorg. Khim., Akad. Nauk S.S.S.R.* 30, 31-8 (1955).—"Intramol. combustion" is the oxidation by O present as a mol. component. One defect of "bomb calorimetry" when used to det. the heat of formation of org. compds. is the fact that the heat of formation appears there as a difference between large heats of combustion each of which must be exceptionally accurate for reliable results. In inorg. chemistry the method offers reliable results (*ibid.* 27, 162, 160 (1953)), and may be considered accurate within $\pm 3\%$. The heat of formation of $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ and of $(\text{NH}_4)_2\text{Cr}_2\text{O}_8$ was measured by the method of and -430 ± 6 and -580 ± 6 kcal./mol. were found for the 2 salts. An attempt was made to expand the homologous series concept of org. chemistry to inorg. compds., and the heat of formation of the 3rd member of the Cr_2O_7 (hypothetical) member of the homologous series, $(\text{NH}_4)_3\text{Cr}_2\text{O}_{11}$, was calcd. to be 730 ± 10 kcal./mol. IV. The synthesis and heat of formation of cobalt chloride diacetate. A. F. Kapustinskii and V. A. Shilovskii. *Ibid.* 30-43. The heat of soln. of CoCl_2 in water found experimentally (19.5) confirms the value obtained by Katzin and Ferraro (C.I. 47, 11930k) of 18.6 kcal./mol. A cryst. diacetate $\text{CoCl}_2 \cdot 2\text{CH}_3\text{COCH}_3$ was synthesized, and the heat of its formation at 18° was -110 kcal./mol.

W. M. Sternberg

RM

KAPUSTINSKIY, A.F.; SOLOKHIN, V.A.

~~Thermochemistry of complex compounds.~~
Thermochemistry of complex compounds. Report no.4. Synthesis
and determination of the heat of formation for cobaltous chloride
diacetate. Izv.Sekt.plat.i blag.met. no.30:39-43 '55.
(MIRA 8:8)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I.Men-
deleyeva,
(Heat of formation) (Cobalt organic compounds)

5(4), 5(2)

AUTHORS:

Kapustin, A. F., Solokhin, V. A.

SOV/198-96-4-1/22

TITLE:

Complex Formation in the System Cobalt Chloride-Acetone, and the Solvation Theory of Solutions (Kompleksobrazovanie v sisteme khloristykh kobalt'atseton i sol'vatnaya teoriya rastvorov)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1990, Nr 4, pp 3-7, USSR

ABSTRACT:

Mendeleev's theory (Ref 1) made it possible for the first time to regard solutions as chemical compounds of the dissolved substance and the solvent; they are in the dissociation state and their composition varies, under maintenance of equilibrium, with the change of concentration and temperature. From that point of view the authors intended to investigate into the above system. Although they succeeded in isolating the crystal acetate $\text{CoCl}_2 \cdot 2\text{CH}_3\text{COCH}_3$ (Ref 2), in pure state and investigating it, the solution of the problem of cobalt chloride forms in liquid acetone proved to be considerably more

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Complex Formation in the System Cobalt Chloride Acetone, SOV/1.3-10-A-1/22
and the Solvation Theory of Solutions

difficult. A survey of the publications edited so far is given (Refs 5-8, 11,12). Blue solutions of cobalt chloride grow pink at a water content of 23%, which corresponds to the dielectricity constant, exceeding 30%. Simultaneously the cobalt chloride molecules are dissociated. Data on the ebullioscopy of cobalt chloride solutions (Table 1) were obtained by the determination method of the solvation of electrolytes (Ref 16), which are solved in media with low constant. It results from this that in solutions near to saturation there are cobalt ions affiliated with the water molecules. The solvation numbers of these concentrations vary within limits near 2, which is apparently characteristic of the cobalt chloride complexes. Measurements of the vapor pressure (Table 2, according to Raoult's law) show that with increasing concentration the molecular weight approaches the same weight of cobalt diacetate ($M \approx 250$) that has not been dissociated. The measurement results of electric conductivity are presented in table 3. The excessively high values of the molecular weights can be explained.

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Complex Formation in the System Cobalt Chloride Acetone, SPV/1.5-98-4-1/22
and the Solvation Theory of Solutions

only by the association and formation of autocomplexes ($\text{Co}[\text{CoCl}_4]$) in the solution. However, the value of the molecular weight would be too low for that, which, on the other hand, indicates the dissociation and solvate formation. Thus, it must be assumed that there are definitely ions in the solution which are affiliated with the water molecules. It results from the experiments that in diluted solutions chlorine ions displace, due to a low constant, the molecules of the solvent and form complex ions $[\text{CoCl}_4]^{2-}$. In concentrated solutions near to saturation, however, the molecules solved in acetone show the same composition as diacetate crystals: in that equilibrium mixture molecules of the same composition dominate; however, they have a double molecular weight. In accordance with the dilution of the solution, the latter pass to monomeric uncharged complexes in a reversible way and under maintenance of the equilibrium. Afterwards, the equilibrium is shifted in the direction of the dissociation. To explain

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Complex Formation in the System Cobalt Chloride Acetone, SOV/153-98-4-1/22
and the Solvation Theory of Solutions

all the properties of the whole system, also the
existence of a series of other intermediate compounds might
be assumed: $[\text{CoAcCl}_3]^-$ and $[\text{CoAc}_3\text{Cl}]^+$. There are 3 tables
and 19 references, 12 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskoy institut imeni
D.I.Mendeleyeva (Moscow **Institute of Chemical Technology**
imeni D.I.Mendeleyev) Kafedra obshchey i neorganicheskoy
khimii (Chair of General and Inorganic Chemistry)

SUBMITTED: October 9, 1957

Card 4/4

KUDRYAVTSEV, A.A.; SELIVANOVA, N.M.; DRAKIN, S.I., dots.; MAYYER, A.I.; SAMPLAVSKAYA, K.K.; SOLOKHIN, V.A.; STAKHANOVA, M.S.; BUNDEL', A.A., prof., ~~retsensent~~; KARAPET'YANTS, M.Kh., doktor khim. nauk, prof., red.; MEL'NIKOVA, T.I., red.

[Laboratory work in general and inorganic chemistry] Praktikum po obshchei i neorganicheskoi khimii. [By] A.A.Kudriavtsev i dr. Moskva, Mosk. khimiko-tekhnol. in-t im. D.I.Mendeleeva. Pt.2. [Work in the chemistry of elements] Raboty po khimii elementov. 1963. 122 p. (MIRA 16:10)

(Chemistry--Laboratory manuals)
(Chemical elements)

DRAKIN, Sergey Ivanovich; KUDRYAVTSEV, Aleksandr Andreyevich;
SELIVANOVA, Nadezhda Mikhaylovna; MAYYER, Antonina
Ivanovna; SAMPLAVSKAYA, Kira Karlovna; SOLOKHIN, Viktor
Aleksyevich; STAKHANOVA, Mariya Sergeyevna; ALAVERDOV,
Ya.G., red.; FEDOROVA, T.P., red.; KARAPET'YANTS, M.Kh., red.

[Laboratory work in general and inorganic chemistry]
Praktikum po obshchei i neorganicheskoi khimii. Moskva,
Vysshaya shkola, 1964. 268 p. (MIRA 18:4)

SOLOKHIN, V.F.

Sinking wells in compact clay ground. Transp.stroi. 13 no.10:
13-14 0 '63. (MIRA 17:8),

OVNATANOV, G.T.; SOLOKHIN, Ye.Ya.; RUPPENET, K.V.; LESIK, N.P.

Determining the adaptability of sands for hydraulic fracturing
of formations. Neft.khoz. 35 no.3:36-39 Mr '57. (MIRA 10:4)

(Petroleum engineering)
(Oil wells)

LESIK, N.P.; OVANTANOV, G.T.; RUPPENYET, K.V.; SOLOKHIN, Ye.Ya.

Principles for physical modeling of hydraulic fracturing of strata.
Trudy VNII no.16:64-74 '58. (MIRA 11:12)
(Geological modeling) (Oil wells--Hydraulic fracturing)
(Rocks--Testing)

SOLOKHIN, Ye.Ya.

Multichannel device for measuring the volume of injected water.
(MIRA 16:9)

Nefteprom. delo no.3:41 '63.

SOLOKHIN, Yu.G., assistant

Automatic control of fluid consumption with use of radioactive
rays. Sud.sil.ust. no.1:189-198 '61. (MIRA 15:7)

1. Kafedra sudovykh turbin Odesskogo vysshego inzhenernogo morskogo
uchilishcha.
(Flow meters) (Radioisotopes--Industrial applications)

KUZNETSOVA Ya.A.; SVETLAYEVA V.M.; ZHURAVLEV, S.V.; VINOKUROV, V.G.;
TROITSKAYA, V.S.; Prinimala uchastiye SOLOKHINA, N.D.

Synthesis and properties of 2-mercaptobenzothiazole derivatives.
Part 1: Some S-substitute 2-mercaptobenzothiazoles and their
sulfones. Zhur.ob.khim. 32 no.9:3007-3011 S '62. (MIRA 15:9)

1. Institut farmakologii i khimioterapii AMN SSSR.
(Benzothiazole) (Sulfones)

VINOKUROV, V.G.; TROITSKAYA, V.S.; SOLOKHINA, N.D.; GRANDBERG, I.I.

Pyrazoles. Part 31: Infrared spectra of 4-acylpyrazoles,
their salts and metal derivatives. Zhur.ob.khim. 33 no.2:
506-511 F '63. (MIRA 16:2)

1. Institut farmakologii i khimioterapii AMN SSSR i Moskovskiy
gosudarstvennyy universitet im. M.V.Lomonosova.
(Pyrazole—Absorption spectra)

SOLOKHINA, V. G.

SOLOKHINA, V. G. -- "OBTAINING OF HEAVY ELECTROLYTIC LEAD DEPOSITS." SUB 20 FEB 52, MOSCOW
ORDER OF LENIN CHEMICO TECHNOLOGICAL INSTITUTE D. I. MENDELEYEV (DISSERTATION FOR THE
DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

~~Solokhina, V.G.~~ Solokhina, V.G.

Bright copper coatings of superior hardness on steel rotating cylinders. V. G. Solokhina, N. T. Kadyavtsev, and V. S. Lapashkin. *Prilozh. Priroda* 1954, No. 2, 72-80; *Refer. Zhur., Khim.* 1954, No. 48075. —Smooth, bright, and hard Cu deposits 100-200 μ thick were obtained from solns. contg. CuSO_4 , 250, H_2SO_4 , 50; thiourea 0.005, Na salt of 2,6- and 2,7-naphthalenedisulfonate 0.5 g./l. at 10-25° and 10 amp./sq. dm. c.d. The quality, hardness, internal strains, and microstructure of the Cu deposit in relation to c.d., stirring, and other factors were studied. A procedure for adjusting the soln. for the thiourea content is described. M. Hosh.

(2)

SOLOKHINA, V. G.

USSR/Chemistry - Electrolysis

Card 1/2

Pub. 147 - 20/26

Authors : Tsareva, Yu. S.; Solokhina, V. G.; Kudryvtsev, N. T.; and Vagramyan, A. T.

Title : Effect of surface active substances on the mechanical properties of electrolytic Cu-depositions

Periodical : Zhur. fiz. khim. 29/1, 166-173, Jan 1955

Abstract : It was established experimentally that surface active substances added some times to an acid copper sulfate solution for copper plating produce different effects on the mechanical properties of the deposit. It was found that surface active substances can cause internal contraction and expansion stresses depending upon the nature and concentration of the substance and the current density.

Institution : Academy of Sciences USSR, Institute of Physical Chemistry, Moscow

Submitted : June 9. 1954

Periodical : Zhur. fiz. khim. 29/1, 116-173, Jan 1955

Card 2/2 Pub. 147 - 20/26

Abstract : It was established that copper deposits obtained from electrolytes containing thiourea and naphthalindisulfonic acid possess sufficient plasticity, high micro-hardness and small internal stresses. An instrument is described which records automatically any changes in internal stresses of electrolytic deposit in electrolysis processes. Nine USSR references (1935-1951). Table; graphs; drawing.

SOLOKHINA, V. G.

Distr: 4E43/4E2c

Bright copper coatings. V. G. Solokhina, N. T. Kudryavtsev, and V. S. Lapatukhin. U.S.S.R. 102,827, May 25, 1956. To the thiourea conc. acid electrolyte used for Cu plating is added 2 g./l. naphthalenedisulfonic acid to reduce the internal strains and the brittleness of the deposit. Cf. C.A. 50, 4677f. M. Hosh.

11/18

5
2

Solokhin, V. G.

Electroplating of lead from alkaline solutions. N. T. Kudryavtsev, V. G. Solokhin, and Ya. V. Matlis. *Zhur. Priklad. Khim.* 29, 236-41 (1956); cf. *C.A.* 44, 2025d. The effect of salts of Sn, Hg, Cu, Al, and Sb, and of K_2CrO_4 , $KMnO_4$, $KClO_4$, H_2O_2 , and glycerol on the quality of the Pb deposit from an alk. electrolyte was detd. in a rectangular glass cell. Glycerol was most effective: the soly. of Pb in 4N KOH increased from 23.8 g./l. without glycerol to 77.5, 104.1, and 115.1 g./l. in the presence of 30, 80, and 130 ml./l. glycerol; the c.d. interval giving dense deposits without dendrites increased, especially at high temps. and when the electrolyte was stirred (with air); the accumulation of carbonate up to 2N did not affect the results. For best results the following conditions were recommended: an electrolyte contg. 0.8-1.0N Pb (as plumbite or glycerite), 3.5-4.5N NaOH (or KOH), 50-65 ml./l. glycerol; temp. 25-40°; without stirring, a.c.d. of 0.5-1.0 and 0.5-1.5

amp./sq. dm. at 18-23° and 60°, resp.; with stirring the c.d. increased to 3-5 amp./sq. dm. The current efficiency approached 100% and the polarization was slight. Good adhesion to Fe was obtained by a preliminary coating of Cu or Cr (0.2-0.5 μ). I. Bencowitz

PM
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SOLOKHINA Y. G.

Electroplating of lead from alkaline solutions. N. T.
Kudryavtsev, V. G. Solokhina, and Ya. V. Matlis. J.
Appl. Chem. U.S.S.R. 29, 251-5 (1956) (Engl. translation).
See C.A. 50, 12897b. B. M. R.

chem

3

AM

LAPATUKHIN, V.S.; KOTIK, R.A.; SOLOKHINA, V.G.

Manufacture of masks with fine structure using a chemical
and electrochemical two-side metal etching technique. Sbor.
mat. po elektrovak. tekhn. no.28:40-50 '61. (MIRA 16:8)

SOLOKHINA, Ye.V., kandidat tekhnicheskikh nauk.

Investigating the parameters of a flow in the axial clearance of a
gas turbine. Trudy MAI no.68:61-81 '56. (MLRA 10:1)
(Gas turbines--Aerodynamics)

SOLOKHINA, Ye.V., kandidat tekhnicheskikh nauk.

Effect of the size of axial clearance on characteristics of gas
turbines. Trudy MAI no.82:59-72 '57. (MIRA 10:10)
(Gas turbines)

ACC NR: AT6028368

(N) SOURCE CODE: UR/0000/65/000/000/0033/0044

AUTHOR: Mil'shteyn, D. M.; Avagimov, A. A.; Dubrovskiy, V. G.; Lykov, V. I.; Pavlenkin, A. D.; Solokhov, V. V.; Shikhanovich, E. L.

ORG: none

TITLE: New trends in studying the structure of the crust and upper mantle by geophysical methods in Turkmenistan

SOURCE: International Geological Congress. 22d, New Delhi, 1964. Geologicheskkiye rezul'taty prikladnoy geofiziki (Geological results of applied geophysics); doklady sovetskikh geologov, problema 2. Moscow, Izd-vo Nedra, 1965, 33-44

TOPIC TAGS: Earth crust, upper mantle, magnetotelluric survey, seismologic investigation, seismic wave, fault / *TURKISTAN*

ABSTRACT: The present paper summarizes the results of geophysical investigations of the Earth's crust and mantle performed since 1961 in the Epihercynian Kara-Kum platform and the folded Alpine region of Kopet-Dag. Magnetotelluric surveys and seismological investigations were conducted along a 110-km submeridional profile extending between Ashkhabad and Bakhardok. Several interfaces were investigated in the area near Ashkhabad. A geological cross section along the profile showing the structure of the Earth's crust and the upper mantle down to 85 km has been prepared

Card 1/2

ACC NR: AT6028368

from the geophysical data. The region lying between the Epihercynian platform and the geosyncline has been analyzed. The presence of lateral inhomogeneities in the mantle is noted. The presence of deep-seated faults is discussed, and their location and extent are determined. Orig. art. has: 1 figure.

SUB CODE: 08/ SUBM DATE: 06Jan65/ ORIG REF: 026/ OTH REF: 002

Card 2/2

DUBROVSKIY, V.G.; SOLOKHOV, V.V.; SHIKHANOVICH, E.L.

Applicability of the method of long-period variations of the telluric currents in the case of a complex geoelectric cross section. Izv. AN Turk. SSR. Ser. fiz.-tekhn., khim. i geol. nauk no.4:26-33 '63.
(MIRA 17:2)

1. Otdel razvedochnoy geofiziki i seysmologii AN Turkmenskoy SSR.

L 47108-66 EWT(1)/FCC GW SOURCE CODE: UR/0169/66/000/002/G001/G002
 ACC NR: ARG019884
 AUTHOR: Mil'shteyn, D. M.; Avagimov, A. A.; Dubrovskiy, V. G.; Lykov, V.I.;
 Favlenkin, A. D.; Solokhov, V. V.; Shikhanovich, E. L.

55
543

TITLE: The formulation of new trends of research on the structure of the Earth's crust and upper mantle in Turkmenistan by geophysical methods

SOURCE: Ref. zh. Geofizika, Abs. 266

REF SOURCE: Sb. Geol. rezul'taty prikl. geofiz. Geofiz. issled. stroyeniya zemn. kory. M., Nedra, 1965, 33-44

TOPIC TAGS: Earth crust, upper mantle, electromagnetic field, magnetotelluric probing, seismologic testing

ABSTRACT: Information on the structure of the Earth can be obtained by a magnetotelluric probing method of observation and interpretation of the recordings of various types of elastic waves, generated during natural earthquakes, and by studying the variations with different periods of the natural electromagnetic field of the Earth. This method is based on the study of the ratio of variations in the electric and magnetic components of the Earth's electromagnetic field.

Card 1/2

UDC: 550.311:551.14(575.4)

L 47108-66

ACC NR: AR6019884

Magnetotelluric probing stations provide the possibility of studying variations of the electromagnetic field during a period of 10 seconds to 24 hours. For improved seismological testing, it was very important to design equipment with an intermediate magnetic recording. An increased resolution of the recordings of the seismograph made it possible to use new inputs to determine the type and analysis of composite waves. Seismological observations and subsurface magnetotelluric probing in Turkmenistan proved the possibility of using both methods for studying sedimentary layers as well as the structure of the Earth's crust and the upper mantle down to depths of approximately 200--250 km. [Translation of abstract] [FM]

SUB CODE: 18, 20/

hs

Card 2/2

USSR/General Problems of Pathology- Tumors. Experimental Therapy. U

Abs Jour : Ref Zhur Biol., No 1, 1959, 4203

Author : Solokhova, L.A., Yankovskaya, T.S., Papoyan, S.A.

Inst : -

Title : The Administration of Neoenbichine (Enbichine No 7)
in Lymphogranulomatosis, Leukosis and Lymphosarcomas

Orig Pub : V sb.: Vopr. rentgenol. i onkol. T. 2. Yerevan, 1957,
325-322.

Abstract : 35 patients were treated with Neoenbichine (I): lympho-
granulomatosis (27), lymphoid leukemia (4), lymphosarco-
matosis (3), myeloid leukemia (1), I was injected to the
patients 203 times weekly, beginning with 5-6 to 9-10 mg
daily; the total course was 40-112 mg. No side effects
were noted in 23 patients, and in the remaining ones ma-
nifestations of nausea and vomiting disappeared or de-
creased when I was administered in combination with hyp-
notics (medinal and others); blood transfusion was

Card 1/2

GAZARYAN, E.S., kand.med.nauk; MAZMANYAN, S.A., mladshiy nauchnyy
sotrudnik; SOLOKHOVA, L.A.

Results of the treatment of lymphogranulomatosis only with
di-trimitan in conjunction with X-ray therapy. Vop.rent.i
onk. 6:265-271 '61. (MIRA 16:2)
(HODCKIN'S DISEASE) (PHARMACOLOGY)
(X RAYS—THERAPEUTIC USE)

SOLOKHIN, A. S.

USSR/ Chemistry Reaction processes

Card : 1/1 Pub. 151 - 2/33

Authors : Konarev, M. I., and Solokin, A. S.

Title : About reactions in solutions between zirconium nitrate and iodates of alkali metals. Part 2.- Composition of Zr-iodate deposits settled in solutions containing potassium iodate

Periodical : Zhur. ob. khim. 24/8, 1279 - 1283, August 1954

Abstract : The composition of crystalline Zr-iodates was determined not only by the concentration of KIO_3 but also by the acidity of the solution. It was established that freshly deposited Zr-iodate is unstable and, during longer stay with the mother liquor, it reacts with KIO_3 and iodic acid forming hexaiodate and enaiodate. The effect of KIO_3 or iodic acid, on the rate of conversion of deposits into crystalline state, is explained. One USSR reference (1954). Tables.

Institution :

Submitted : March 15, 1954

LOBASTOV, V.D., inzhener; SOLOKOVICH, D.Ya., otvetstvennyy redaktor.

[Catalog of telegraphic equipment] Katalog telegrafnoi apparatury.
Moskva, Red.-izd. otdel BTI, 1948. 102 p. (MLBA 8:2)

1. Russia (1923- U.S.S.R.) Ministerstvo promyshlennosti sredstv
svyazi. Byuro tekhnicheskoy informatsii.
(Telegraph--Apparatus and supplies) (Telegraph, Wireless)

ACC NR: AT0022268

SOURCE CODE: UR/0000/66/000/000/0024/0027

AUTHCR: Deryugin, I. A.; Solomko, A. A.

ORG: none

TITLE: Information capacity of laser modulators in the microwave band

SOJRC: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966.
Sektziya kvantovoy elektroniki. Doklady. Moscow, 1966, 24-27

TOPIC TAGS: solid state laser, laser modulation, laser communication

ABSTRACT: A formula is developed for the bandwidth of laser modulators based on the linear electro-optical effect. The formula shows that the bandwidth increases when the crystal length decreases. Microwave bandwidths are calculated for the modulators having the form of a circular (mode E) and rectangular (mode TE) waveguides partially loaded with active crystals. Neglecting the microwave losses, a circular waveguide can transmit up to 10^7 bits per sec at 9470 Mc with $\Delta\nu = 30$ Mc, a rectangular waveguide would transmit up to 10^9 bits per sec. With an allowance for the microwave losses, the information capacity is still $10^6 - 10^7$ bits per sec. [03]
Orig. art. has: 13 formulas.

SUB CODE: 20 / SUBM DATE: 11Apr66/ ATD PRESS: 5051

Card 1/1

GARTSMAN, B.N., kand.ekonom.nauk; VAL'SHONOK, A.S., inzh.-ekonomist;
SOLOLINA, D.L., inzh.-ekonomist

Growth of production and improvement of technical and economic
indices in the building-ceramics industry. Trudy NII Stroikeramiki
no. 14:154-168 '59. (MIRA 14:1)
(Ceramic industries)

SOLOV, A. A.

1152. The Classical Theory of Elementary Particles (Point Electron), by A. A. Sololov.
Vestnik Vostochnogo Universiteta USSR, No. 2, February 1947, 16 p. (In
Russian).

Mathematical discussion showing that to exclude the infinite proper mass of an electron,
its own field must be considered as well as the Maxwellian field. Also, an equation
describing the movement of a point electron is examined.

S L L V, A. A.

Solovov, A. A. and Ternov, I. M. - "On the quantum theory of the radiating electron
III." (p. 698)

SO: ZHURNAL EXPERIMENTAL'NOI I TEORETICHESKOI FIZIKI 1953, Vol. 25, No. 6 (12)

SOLOLOV B. V.

181T33

USSR/Electricity - Transmission Lines
Clamps

Jan 51

"Release Clamps for Electrical Transmission Lines,"
S. S. Rokotyan, B. V. Sololov, A. N. Sherentsis,
Engineers, "Teploelektroproyekt"

"Elektrichestvo" No 1, pp 60-64

Discusses constr of release clamps. Anal of their
operation in elec power systems of Min of Elec Power
Sta shows their use is effective from economic
standpoint. Submitted 17 Aug 50.

181T33

SOLOLOV, D. D.

Afforestation

Park in a semiarid area. D. D. Sokolov. Les i step' 4, No. 7, July 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952.

SOLGLOV, G., direktor-podpolkovnik tyagi

Practices of progressive engineers in obtaining higher efficiency
of locomotives. Zhel. dor. transp. no.3:16-26 '47.

(MIRA 13:2)

(Locomotives--Performance)

SOLOVYOV, I. M.

"Plasmon in the fight against gastro-intestinal diseases of the young."

SO: Veterinariya 30 (9), September 1953.

SOLOLOVA-VASIL'YEVA, Ye.A.; KUDRYAVTSEV, G.I.; STREPIKHEYEV, A.A.

Saponification process of polyacrylonitrile by sulfuric acid.
Zhur. prikl. khim. v. 31 no.5:785-790 My '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

(Saponification) (Nitro compounds) (Sulfuric acid)

SOV-21-58-4-19/29

AUTHORS: Kucherenko, M.T. and Solol'skaya, A.V.

TITLE: On Certain Peculiarities of Sediment and Coal Accumulation in the West Regions of the Donbas During the Carboniferous Period (O nekotorykh osobennostyakh osadko- i uglerakopleniya v Karbone zapadnykh rayonov Donbassa)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 4, pp 434-436 (USSR)

ABSTRACT: On the basis of a study of lithology and facial peculiarities of the Carboniferous sediments of the suites C_1 to C_4 in the western regions of the Donbas, it was established that the conditions of peat accumulation in the Lower and Middle Carboniferous times were not the same. In the Lower Carboniferous time, peat formation was connected primarily with boggy maritime lagoons, while in the Middle Carboniferous (suites C_2 to C_4) peat bogs were mainly formed on broad alluvial plains. Differences in the coal quality of

Card 1/2

SOV-21-58-4-19/29

On Certain Peculiarities of Sediment and Coal Accumulation in the West
Regions of the Donbas During the Carboniferous Period

the Lower and Middle Carboniferous ages are accounted for
by different conditions of peat accumulation. There is
1 Soviet reference.

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet (Dneprope-
trovsk State University)

PRESENTED: By Member of the AS UkrSSR, V.G. Bondarchuk

SUBMITTED: July 26, 1957

NOTE: Russian title and Russian names of individuals and insti-
tutions appearing in this article have been used in the
transliteration.

1. Geology--USSR
2. Coal--Geology
3. Peat--Geology
4. Geological time--Determination

Card 2/2

L 1709-66

ACCESSION NR: AP5021955

EWI(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b)

IJP(c)

MJW/JD

UR/0193/65/000/008/0050/0052

621.745.32:621.3.011.3:669.721.5

AUTHOR: Kalish, R. M. (Cand. of technical sciences); Sololovskiy, B. A.; Dement'yev, A. L.

TITLE: Experience in melting magnesium alloys in furnaces of the IPNV-500 type

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 8, 1965, 50-52

TOPIC TAGS: magnesium alloy, induction furnace, melting, furnace, heat transfer

ABSTRACT: Four commercial frequency induction furnaces with a removable 500 kg crucible (see figure), designed for melting magnesium alloys without recasting into distributing furnaces have been built and installed at an [unnamed] plant of the Central Volga Regional Economic Council. One of them has by now been operated for one and one-half years. The furnace's crucible is of an all-welded cone-shaped steel-plate design. Its walls are 20 mm thick and bottom 30 mm thick. The crucible is 1260 mm thick, with a mean inside diameter of 630 mm. Principal specifications of the furnace: time of melting and preparation of working alloy, 80 and 60 min (for cold and hot crucible, respectively); melt temperature, 850°C; maximum and mean furnace power, 350 and 320 kw, respectively; maximum furnace

Card 1/3

L 1709-66

ACCESSION NR: AP5021955

current, 1000 a: efficiency, 0.88; unit power requirement per kg of magnesium alloy produced, 0.6 kw. Operating experience shows that the production of magnesium alloys in this furnace rather than by the duplex process saves at least 12,000 rubles per year per furnace and takes only one-half as long. After disconnection of the furnace the metal is not removed for 15-20 min. During that period the temperature of the alloy continues to rise owing to heat transfer from the muffle rings. After this temperature reaches 780°C, the metal is cast into molds. Tests show that both the mechanical and corrosion properties of the ML-5 alloy produced in the IPMV-500 furnace are not inferior to those of the alloy produced by the duplex process.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 01

SUB CODE: MM, IE

OTHER: 000

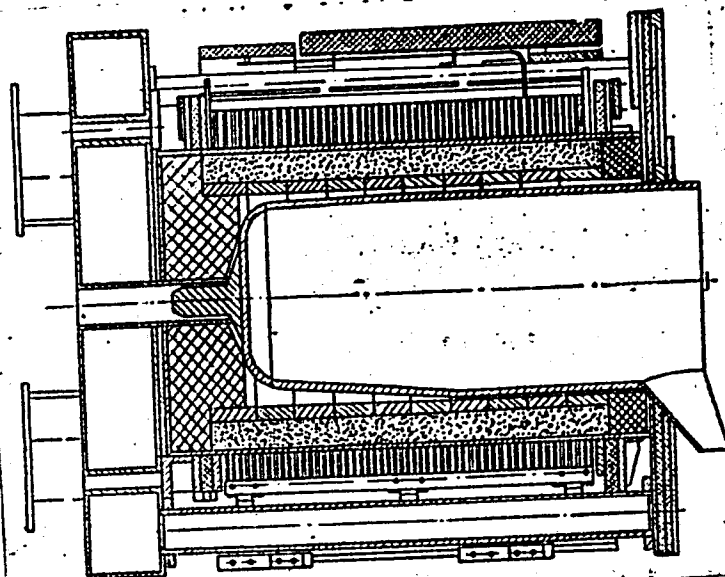
Card 2/3

L 1709-66

ACCESSION NR: AP5021955

ENCLOSURE: 01

cross section of IPNV-500 type
crucible furnace



Card

3/3

L 29215-66

ACC NR: AP6019096

(A,N)

SOURCE CODE: UR/0346/66/000/002/0069/0071

AUTHOR: Solomakha, A. I. (Aspirant)

ORG: All-Union Institute of Experimental Veterinary Medicine /Scientific head, Candidate of veterinary sciences D. D. Poloz/ (Vsesoyuznyy institut eksperimental'noy veterinarii)

TITLE: Potentiometric method of measuring cholinesterase activity in animal blood

SOURCE: Veterinariya, no. 2, 1966, 69-71

TOPIC TAGS: enzyme, blood, hydrolysis, potentiometer

ABSTRACT: The author's method is based on measurement of the degree of change in the concentration of hydrogen ions in the reaction mixture as a result of the acid formed in enzymatic hydrolysis of the corresponding choline ester (acetylcholine, butyl choline, etc.). Detailed directions are given for plotting the calibration curve and for carrying out measurements. Figures for cholinesterase activity in the blood, plasma, and erythrocytes of five different animals (horses, dogs, cattle, sheep, and chickens) are given in a table. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 06, 07 / SUBM DATE: none

Card 1/1

UDC: 619.616.543.257.1

SOLOMAKHA, G. P., Cand Tech Sci -- (diss) "Mass-transmission
in the gaseous phase on ^{sieve} ~~net-shaped~~ plates." Mos, 1957. 18
pp with graphs (Min of Higher Education USSR, Mos Inst of
Chem Machine ^{Building} ~~Construction~~), 100 copies (KL, 52-57, 108)

- 74 -

Solomonakha, G. P.

Distr: 4E4.j

7
/ Mass transfer in the gas phase on perforated plates.
G. P. Solomonakha and V. I. Matrosov. *Kislovodsk* 10, No. 2,
16-26 (1957). — Nitrogen was absorbed from mixts. with air in a
perforated-plate column at various rates of gas flow and at
various designs of the plates. All the possibilities are
treated mathematically, and formulas are derived for the
best design of perforated plates, so that a rather compact
absorption column is the final result. 17 references.

Werner Jacobson

Werner Jacobson

SOV/124-58-11-12885

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 145 (USSR)

AUTHORS: Solomakha, G. P., Matrozov, V. I.

TITLE: Investigation of the Mass Exchange in the Gaseous Phase on Sieve Plates (Issledovaniye massoobmena v gazovoy faze na sitchatykh tarelkakh)

PERIODICAL: Tr. Mosk. in-ta khim. mashinostr., 1957, Vol 13, pp 53-77

ABSTRACT: Bibliographic entry

Card 1/1

PLANOVSKIY, A.N.; MATROZOV, V.I.; CHEKHOV, O.S.; SOLOMAKHA, G.P.

Relationship between mass transfer and liquid resistance on bubble-
cap and sieve plates. Khim. i tekhn. topl. i masel 3 no.3:30-33
Mr '58. (MIRA 11:3)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
(Plate towers)

SOLOMAKHA, G.P., kand.tekhn.nauk; BLYAKHMAN, L.I., kand.tekhn.nauk;
PROKHOROV, V.P., inzh.

Column apparatus for the decarbonization of cyclohexylamine
carbonate solutions. Khim. mashinostr. no. 6:4-5 N-D '62.
(MIRA 17:9)

SOLOMAKHA, G.P.; PLANOVSKIY, A.N.

Relationship between mass transfer in the gaseous phase
and hydraulic parameters in bubbling (sieve plates).
Khim.i tekhn.tochl.i masel 7 no.6:1-7 Je '62. (MIRA 15:7)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut
organicheskikh poluproduktov i krasiteley i Moskovskiy
institut khimicheskogo mashinostroyeniya.
(Plate towers)

PLANOVSKIY, A.N. ; SOLOMAKHA, G.P.

Dependence between mass transfer in the gas phase and hydraulic parameters in bubbling. Khim. i tekhn. topl. i masel 7
no.10:1-8 0'62 (MIRA 17:7)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley i Moskovskiy institut khimicheskogo mashinostroyeniya.

SOLOMAKHA, G.P.

First International Congress on Chemical Engineering Techniques,
Chemical Machinery Manufacture, and Automation. Khim.i tekhn.
topl.i masel 8 no.1:71-72 Ja '63. (MIRA 16:2)
(Chemical engineering--Congresses)
(Automation--Congresses)

PLANOVSKIY, A.N.; SOLOMAKHA, G.P.; FLOAREA, O.; SARUKHANOV, A.V.

Structure of criterional equations characterizing mass
transfer in plate columns. Khim. prom. no.2:123-125 F '63.
(MIRA 16:7)

(Plate towers) (Mass transfer)

SOLOMAKHIN, G. P.

"On the form of generalized equations describing mass transfer in a gas phase on turbogrid trays."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Sci Res Inst of Organic Intermediate Products & Pigments.

1977 18:13

Equations for mass transfer in a gas phase in sieve and perforated
downcomerless plates. Khim. prom. 40 no.10:749-753 0 '64.

(MIRA 18:13)

KARISHIN, A.P.; SOLOVAKOVA, L.A.

Condensation of acenaphthensquinone and its halo derivatives
with rhodanine. Zhur. org. khim. 1 no.11:2062-2063 N '65.
(MJRA 18:12)

1. Poltavskiy pedagogicheskiy institut. Submitted August
4, 1964.

Investigation of the Temperature Influence on the S/170/60/003/008/006/014
Luminescence- and Absorption Spectra of B019/B054 82322
Complex Molecules in Solutions

phthalimides have the same character of band shifting. In the solutions mentioned at first (Fig. 3, Table 1) the optical transparency is maintained at the change in state caused by the cooling whereas in the solutions with different character of shifting the strong fissuring exerts an influence on the change of state. Further investigations have shown that the shift of the fluorescence- and absorption spectra occurs in the direction of the electron transition frequency. This effect may be observed both with solid solutions and with liquid ones which change their state with decreasing temperature. Theoretical investigations show that the spectral shift toward the electron transition frequency is due to the change in probability of vibrational transitions of electrons. This is explained in connection with the increasing effect of the medium on the fluorescent molecule. B. I. Stepanov (Ref. 1), L. P. Kazachenko (Ref. 7), and R. V. Lel'chuk are mentioned. The authors thank A. N. Sevchenko and B. I. Stepanov, Academicians of the AS BSSR, for valuable advice, and V. V. Zelinskiy, Candidate of Chemical Sciences, for the supply of the phthalimides. There are 4 figures, 1 table, and 15 Soviet references. ✓

Card 2/3

KUCHOMOV, P.F.; KOVALEVSKAYA, N.I. [Kovalevs'ka, N.I.]; SOLOMAKHA, M.N.
[Solomakha, M.M.]

Works on the selection of sorghum and Sudan grass hybrids.
Trudy Inst. gen. i sel. AN URSR 5:3-10 '58 (MIRA 11:9)
(Sorghum) (Sudan grass)

S/133/60/000/008/007/013

Relation Between the Number of Tubes Rejected on Account of Skins and the Chemical Composition of Steel

aggravates the defects in tubes by extending them longitudinally and by "pushing" them in radial direction. With regard to chemical composition it was found that mainly sulfur has a considerable effect on skin formation. Structural analyses disclosed the segregation of sulfur along the longitudinal axis of the casting, i.e., in the zone, where the mandrel passes through the hollow shape in the pilger process, which gives a physical explanation of this phenomenon. In tubes made of steels with a higher manganese content (36Г2С = 36Г2S type steels, with 1.65-1.85% Mn-content) the skin formation is inhibited, as manganese forms with sulfur heat-resistant compounds in the steel and prevents the formation of easily melting sulfurous eutectics on the boundaries of the nuclei. Tubes with a higher manganese and carbon content (made of drill steel), however, can be deteriorated in quality on account of their phosphorus content. By methods of mathematical statistics based on tests carried out for 9 months on the sulfur and phosphorus content of steel for drill tubes, the following correlation coefficients were obtained: 0.33 (for S) and 0.34 (for P). By lowering the S and P content to 0.005% in the steel, the waste in tubes due to skins can be reduced by 7-10% and for the Taganrog Metallurgical

Card 2/3

Relation Between the Number of Tubes Rejected on Account of Skins and the
Chemical Composition of Steel

S/133/60/000/008/007/013

Plant this means a saving of 600,000-700,000 rubles annually. There are
3 tables. ✓

ASSOCIATION: Taganrogskiy metallurgicheskiy zavod (Taganrog Metallurgical
Plant)

Card 3/3

SOLOMAKHA, N.K.

Optimum weight of the charge for open-hearth furnaces. Metallurg
8 no.8:17-18 Ag '63. (MIRA 16:10)

1. SOLOMAKHA, V., Eng.
2. USSR (600)
4. Machine-Tractor Stations
7. In Gitalov's brigade, MTS, 13, no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

S/598/60/000/004/005/020
D215/D302

AUTHORS: Reznichenko, V.A. and Solomakha, V.P.

TITLE: Chlorination of titanium monoxide and dioxide

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego
splavy. No. 4. Moscow, 1960. Metallurgiya titana, 39-53

TEXT: An investigation of the kinetics and thermodynamics of the chlorination of TiO and TiO_2 with molecular Cl_2 is described, after a theoretical discussion based on Soviet-bloc and Western work. Knowledge of these reactions is said to be of great practical value in treating Ti-containing slags. The chlorinations were studied by passing dry Cl_2 (in 50.% excess) at 6 l/hr over 10g compacts of the solid reactants, in a tubular furnace, for 1 1/2 hours. The compacted reactants consisted of Ti oxide (100), petroleum coke (50) and coal tar pitch in CCl_4 (8 parts) and were first briquetted, dried and degassed in vacuum.

Card 1/3

Chlorination of titanium ...

S/598/60/000/004/005/020
D215/D302

at 800°C. The reaction tube was purged with N₂ before and after each experiment and all products were collected and analyzed, following the extent of the reactions by measuring the yields of TiCl₄. Oxygen contents in the gaseous and solid products and the initial and final TiO₂ contents were also determined. The above 3 methods gave closely similar results. An empirical relationship $B^2 = -b + kQ$, where B=% chlorination, Q-gas flow and b and k are constants, was discovered for TiO₂, for Q varying between 2 and 13 l/hr, at 700°C. At 6l of Cl₂ per hour, up to 60% excess of C over the stoichiometric amount had no effect on B. The relationships between B and time, at 400°C, 500°C, 600°C, 700°C and 900°C are shown graphically. It was found that the extent of chlorination could be expressed as $B^2 = -b + A \cdot t \cdot \frac{-E}{e^{RT}}$, where t = time, A,

R and T have the usual meanings and the activation energy E was ~1,650 cal/mole for the initial straight portion of the curves and increased

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Chlorination of titanium ...

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to 2,200 cal/mole for the parabolic parts of the curves. TiO was chlorinated at lower temperatures and little advantage was obtained by working above 600°C. There are 8 figures, 2 tables and 13 references: 11 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: G. Skinner, H.L. Johnston and C. Beckett; 'Titanium and its compounds' Columbus, Ohio, 1954.

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S/137/62/000/006/045/163
A006/A101

AUTHORS: Dmitrovskiy, Ye. B., Reznichenko, V. A., Solomakha, V. P.

TITLE: Developing a system of using leucoxene-containing ores

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 15, abstract 6G112
(In collection: "Titan i yego splavy", no. 5, Moscow, AN SSSR, 1961, 13-16)

TEXT: An electromagnetic concentration scheme with preliminary reduction-roasting of ore was selected for the concentration of Ti-ore, represented by leucoxene-enriched sandstone. Prior to roasting the ore is mixed with petroleum cokes, the roasting temperature is 1,150°C and duration 1.5 hours. Electromagnetic separation is conducted in a field of about 2,000 oersted strength. The concentrate obtained contains 42 - 43% TiO_2 , 14.4% Fe_2O_3 and is chlorinated at 600°C. The percentage of chlorination is 98.9 for Ti, 8.3 for Si, 94.5 for Al, & for Fe. Cl consumption per 1 ton of concentrate is 1.23 tons.

[Abstracter's note: Complete translation]

L. Vorob'yeva

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S/598/61/000/005/001/010
D040/D113

AUTHORS: Remnichenko, V.A., and Solomakha, V.P.

TITLE: An investigation of the titanium slag chlorination process

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy, no. 5, Moscow, 1961. Metallurgiya i Khimiya titana, 102-114

NOTE: The investigation was conducted with slags obtained by reduction melting of ilmenite concentrate, which is a less costly method of obtaining titanium tetrachloride than direct chlorination of ilmenite concentrate, which requires high quantities of chlorine gas and produces iron chlorides which cannot be utilized in industry. Chlorination of pure titanium oxides TiO_2 , Ti_3O_5 , Ti_2O_3 and TiO , and titanium carbide had been tried previously and the described experiments are a continuation of studies in this field. The study was conducted to investigate the effect of the chemical and mineralogical composition of slags on the intensity of chlorination; the

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An investigation of the titanium ...

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features of processes using different slag types; the effect of low Ti oxides, of calcium, magnesium and iron oxide, silica, alumina and carbon; variations in the gaseous phase composition during the chlorination process. The experimental unit consisted of pipings for chlorine gas and inert gas leading from chlorine and nitrogen containers, three columns with calcium chloride for gas drying, and a vertical celite furnace with a quartz reaction tube holding cakes of slag through which chlorine gas penetrated from the bottom and upwards. The article includes details of techniques and the chemical composition of eleven slag types used. Conclusions: (1) Low titanium oxides slow down the process of titanium slag chlorination and raise the carbon monoxide content in the gaseous phase; (2) Calcium oxide (5.6%) and magnesium oxide (6.8%) speed up the chlorination of titanium slags. Therefore, titanium slags obtained by flux melt are chlorinated faster than chemically pure titanium dioxide and considerably faster than slags from ilmenite concentrate melts without addition of a flux. The activating effect of magnesium and calcium oxides on the chlorination process of titanium slags confirms that the process is of an absorption-chemical type. There are 4 figures and 8 tables.

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AUTHORS: Resnichenko, V.I., and Solomakha, V.P.

TITLE: Investigation of the titanium dioxide chlorination process

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy, no. 5, Moscow, 1961. Metallurgiya i Khimiya titana, 115-119

TEXT: Experiments were conducted (1) to study the effect of chlorine gas flow velocity in chlorination of TiO_2 in the presence of solid carbon, the degree of chlorine utilization, and the composition of the forming gas, and (2) to find means of accelerating the existing process and developing new chlorination processes for titanium ores. Temperature variations tried in previous experiments had an insufficient effect. The subject experiments were conducted with TiO_2 cake charges of 10 g weight in a reaction tube, at chlorine gas consumption between 0.35 and 20 l/hr and flow velocity between 20 and 160 cm/min. The investigation details were described previously by the authors (Symposium "Titan i yego splavy" ["Titanium and Its Alloys"]),

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Investigation of the titanium dioxide...

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exp. 4, End-re (N 0332). Chlorination was carried out at 700°C, and the gas composition variations studied at 600°C, 800°C and 900°C. Increase of gas flow velocity greatly speeded up the process, e.g. from 60 min at 5 l/hr chlorine consumption and 33.3 cm/min velocity to 35 min at 18.25 l/hr and 120 cm/min. A velocity increase over 120 cm/min had practically no effect on the chlorination intensity or the TiCl₄ output per 1 cm² of the cross section area of the reaction tube. The relative quantity of CO in the forming gas increased with increase in temperature and chlorine flow velocity. Chlorine breakthrough occurred every time at TiCl₄ output of 60-75%, regardless of the permeability of charge in the tube and of the chlorine flow velocity. This led to the assumption that the process can be intensified by high chlorine consumption, and that the use of a boiling layer will be the proper means for chlorination of TiO₂. Conclusions: (1) Hydrodynamic factors have a predominant effect in the process, and chlorine blowback is caused only by the diffusion resistance of the medium due to excess of reducing agent, density of cakes, etc. Chlorine blowback can always be pre-

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